

ABSTRACT OF THE DISCLOSURE

An electrode assembly of a semiconductor processing chamber wherein heat transfer between a backing plate and a showerhead electrode is improved by an electrostatic clamping arrangement, which includes a compliant material in contact with a surface of the showerhead electrode. The showerhead electrode is removably attached to the backing plate by a mechanical clamping arrangement which engages an outer periphery of the showerhead electrode. The electrostatic clamping arrangement is coextensive with the showerhead electrode to improve thermal conduction between the backing plate and the showerhead electrode.